

Applicant submits that neither Meunier nor Diehl, singularly or in combination, render claims 3-4, 8-11, 13, 15-16, 21-23, 25-29, and 31-49 obvious, and therefore the pending rejections should be withdrawn.

In rejecting the claims, the Examiner alleges that Meunier discloses "a plurality of candidate audio commands," "comparing candidate commands with previously registered audio commands," and "adding the candidate command if associated accuracy values exceed a predetermined value." See page 2 of the Office Action mailed December 19, 2001. In addition, the Examiner alleges that, while Meunier does not teach a system that "controls two speech-enabled applications," Diehl does teach "controlling multiple device speech enabled applications . . . via pre-trained voice commands." *Id.* Therefore, the Examiner concludes, "it would have been obvious to modify the system of Meunier to allow for voice control of multiple speech enabled applications via one central system." *Id.* at 3.

Applicant respectfully disagrees with the Examiner's reading of Meunier and Diehl, and with the conclusion that one of ordinary skill in the art would combine Meunier and Diehl to achieve Applicant's claimed invention.

Independent claim 8 and dependent claims 9-11 and 32-34 are allowable over the cited references

To begin with, Applicant's independent claim 8 recites,

A speech-enabled apparatus for developing a speech menu to control at least two speech-enabled applications, comprising: a distance accuracy module capable of comparing at least one candidate sound command from each application to a previously-stored sound command in the speech menu to determine an accuracy value, the distance accuracy module capable of installing the sound commands for each application unless the accuracy value is less than a predetermined value.

Meunier does not teach or suggest: a distance accuracy module, which compares at least one candidate sound command from each *application* to develop a speech menu. Instead, Meunier discloses a method of training a model word. Meunier's method necessitates two steps: first, a word is trained and second, the new

word is analyzed to determine its similarity with existing vocabulary words. See Meunier, column 3:10-12. There is no disclosure of simply comparing a word with other existing words to form a speech menu. Meunier always requires a first training step. Nor is there any suggestion of using the method disclosed in Meunier with more than one application or device.

In addition, Diehl does not teach or suggest the claimed apparatus for developing a speech menu from more than one device. Diehl appears to disclose a method for determining which device, in a multi-device set up, is being addressed by a speaker. See Diehl column 2:31-49. Diehl uses a central bus to determine which device a speaker is trying to control and allows for the same command to apply to more than one device. *Id.* lines 31-49 and 53-56. However, there is no teaching or suggestion in Diehl of developing a speech menu to control multiple devices.

In the claimed invention, a determined accuracy value is used to forestall the addition of a similar or same word to the speech menu, where the speech menu is developed by installing words from multiple applications. Applicant submits that, even if Diehl discloses controlling multiple devices with speech, it does not teach or suggest the claimed apparatus for developing a *speech menu* to control at least two applications. Furthermore, the manner in which Diehl controls the multiple devices is entirely different than that claimed by Applicant.

Therefore, Applicant submits that neither Meunier nor Diehl discloses Applicant's claimed speech-enabled apparatus.

Note also that there is no motivation to modify or combine the references as the Examiner indicated, to achieve Applicant's claimed apparatus. The Examiner argues that it would have been obvious "to modify the system of Meunier to allow for voice control of multiple speech enabled applications via one central system, as taught by Diehl, for the purpose of enhancing user friendliness." However, as discussed above, "the system" of Meunier is not similar to the claimed invention. There is no suggestion within Meunier of developing a speech menu without a training step or of developing a speech menu for two devices or applications. Similarly, Diehl does not enable control of multiple speech applications in the same way as claimed. In Diehl, there is no teaching

or suggestion of developing a *speech menu* to control multiple devices. Therefore, there is insufficient motivation for one of ordinary skill in the art to combine the references to achieve Applicant's claimed apparatus.

Applicant submits that neither Meunier nor Diehl, singularly or in combination, render independent claim 8 obvious. Nor does either reference render claims 9-11 and 32-34 obvious, at least by virtue of their dependency and additional recitations.

Independent claims 13 and dependent claims 15-16 are allowable over the cited references

Similarly, independent claim 13 recites a set of instructions, which when executed, implement development of a speech menu, including

comparing candidate sound commands from at least two device predetermined tables to previously-stored sound commands to determine an accuracy value therebetween and if the accuracy values each are less than a predetermined value, installing the candidate sound commands of each device in the speech menu.

Neither Meunier, singularly or in combination with Diehl, renders independent claim 13 obvious. There is no disclosure of at least two *device predetermined* tables. Nor is there disclosure of comparing candidate sound commands from at least two *device predetermined tables* to determine an accuracy value or a candidate sound command for each device into a speech menu.

Therefore, neither Meunier nor Diehl, singularly or in combination, render independent claim 13 obvious. Nor does either reference render dependent claims 15-16 obvious, at least by virtue of their dependency and additional recitations.

Independent claim 21 and dependent claims 22-23, 25, and 34 are allowable

Independent claim 21 recites a method of building a speech menu to control at least two devices. The method includes, identifying at least two devices, each device having at least one candidate audio command associated with it and comparing each of the candidate audio commands device with previously registered audio commands to develop an accuracy value. The method also includes adding to the speech menu

those candidate audio commands for which associated accuracy values exceed a predetermined value.

Here again, neither reference teaches or suggests building a speech menu to control at least two devices. Nor do the references teach or suggest comparing audio commands to determine an accuracy value, where the commands are associated with different devices. Therefore, one of ordinary skill in the art would not have been motivated to achieve Applicant's invention by the teachings or suggestions in the references. Thus, independent claims 21 and dependent claims 22-23, 25, and 34, are allowable over the cited prior art and the pending rejection should be withdrawn.

Independent claim 26 and dependent claims 27-29 and 31 are allowable

Applicant respectfully requests withdrawal of the rejection of claims 26-29 and 31.

Independent claim 26 recites a method of building a speech menu to control at least two devices. The method includes comparing at least one candidate audio command from each device with each audio command previously installed in the speech menu to develop an accuracy value. And installing the candidate audio commands in the speech menu if each of the accuracy values exceeds a predetermined value.

Similar to the claims discussed above, neither reference teaches or suggests building a speech menu to control at least two devices or that audio commands from each device be installed in a speech menu, which will control each of the devices. Therefore, one of ordinary skill in the art would not have been motivated to achieve Applicant's claimed invention, and requests withdrawal of the pending rejection of claims 26-29 and 31.

Independent claim 35 and dependent claim 36 are allowable over the cited prior art

Independent claim 35 is directed to a computer data signal embodied in a carrier wave. The data signal develops a speech menu for a speech-enabled application. The signal includes

a comparison source code segment comparing, candidate audio commands of at least two devices with previously registered audio commands to develop accuracy values, and an installation source code segment installing the candidate audio commands in the speech menu if each of the accuracy values associated with the respective candidate audio command exceeds a predetermined value.

Neither Meunier nor Diehl teach or suggest comparing audio commands associated with at least two devices and then installing the commands in a speech menu. Therefore, the rejection of claims 35-36 should be withdrawn.

Independent claim 37 and dependent claims 38-42 are allowable

Independent claims 37 recites a method for building a speech menu from separate pre-existing speech menus. The method includes,

determining a similarity of at least two predetermined and pre-trained audio commands from the pre-existing speech menus by comparing each audio command to the others, to determine an accuracy value and combining each of the at least two audio commands in a final speech menu, wherein the accuracy value for each audio command is greater than or equal to a predetermined value.

Neither reference teaches or suggests building a speech menu from pre-existing speech menus.

Therefore, one of ordinary skill in the art would not have been motivated to combine or modify the references to achieve Applicant's claimed invention and the rejection of claims 37-42 should be withdrawn.

Claims 43-46 are allowable

Applicant respectfully submits that independent claim 43 and dependent claims 44-46 are allowable over the cited prior art references. Independent claim 43 claims a speech-enabled apparatus. This apparatus includes

a distance accuracy module capable of determining the similarity of at least two *pre-trained audio commands*, each pre-trained audio command being selected from a *pre-existing speech menu*, and capable of installing each pre-trained audio command into a *final speech menu* unless an accuracy value for each audio command is less than a predetermined value.

None of the cited references teach or suggest a final speech menu, including commands from pre-existing speech menus.

Therefore, one of ordinary skill in the art would not have been motivated to achieve Applicant's claimed invention by combining or modifying the two references and the rejection of claims 43-46 should be withdrawn.

Claims 47-48 are allowable over the cited prior art

Independent claim 47 claims a set of instructions, which can implement development of a speech menu. Claim 47 recites in part, "determining a similarity of at least two pre-trained audio commands from pre-existing speech menus" and combining the commands into "a final speech menu."

As discussed above, neither reference teaches or suggests pre-existing speech menus or combining audio commands into a final speech menu. Therefore, one of ordinary skill in the art would not have been motivated to combine or modify the cited references to achieve Applicant's claimed invention and the rejection of claims 47-48 should be withdrawn.

Independent claim 49 is allowable

Claim 49 claims "a computer data signal embodied in a carrier wave to develop a speech menu." The signal includes "a determining source code segment comparing at least two pre-trained audio commands from pre-existing speech menus" and "a combining source code segment installing the candidate audio commands in a final speech menu."

Here again, neither Meunier nor Diehl teach or suggest audio command from pre-existing speech menus and installing these commands into a final speech menu.

One of ordinary skill in the art would not have been motivated to modify or combine the references to achieve the invention recited in claim 49. Therefore, the rejection of claim 49 should be withdrawn.

Dependent Claims 12, 19, 24, and 30 Are Allowable Over The Addition of Lasar

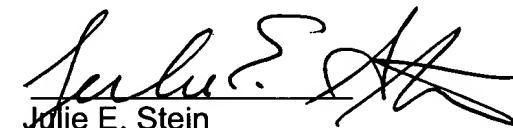
The rejection of claims 12, 19, 24, and 30 should be withdrawn. Dependent claims 12, 19, 24, and 30 all recite that the audio command recited in the corresponding independent claims can be a tone. In rejecting these dependent claims, the Examiner cited Meunier in view of Diehl and further in view of Lasar. However, while Lasar discloses a device that takes musical tones and converts them to digital signals/numbers, which can then be used to control a given device, it does not disclose any of the missing elements or motivation from the independent claims.

Therefore, even with the addition of Lasar, one of ordinary skill in the art would not have been motivated to achieve the claimed invention as recited in dependent claims 12, 19, 24, and 30 and thus the rejection should be withdrawn.

Applicant respectfully requests allowance of the application.

Respectfully submitted,

Date: 3-19-02


Julie E. Stein
Registration No. 43,158

KENYON & KENYON
1500 K Street, NW, Suite 700
Washington, D.C. 20005

Phone: (202) 220-4200
Fax: (202) 220-4201
JStein@Kenyon.com